O&M TRAINING CENTER COURSE

Course Title:	Positive & Non-Positive Displacement Pumps
Location:	San Joaquin Field Division
Sponsor:	O&M Training Center
Participants:	H.E.P. Journey-level Trades & Crafts Personnel
Class Limits:	Minimum 10, Maximum 20
Class Dates:	
Time:	0800 to 1530 hours, Days 1 thru 3 24 Hours
Instructor:	John Trageser
Course Information:	This is a 3-day course on pumps. The course will help personnel to understand and review the basics of pump operation, and understand the common terms and definitions used when discussing, selecting, or troubleshooting problems.
Class Prerequisites:	Participants should read TPC Mechanical Maintenance Unit #305, if available in the Field Division library, or have a working knowledge of pumps prior to attending class.

Class Subjects

Day One - Types of Pumps

- Positive displacement pump definitions and operations.
- Types of positive displacement pumps.
- Displacement, volumetric efficiency and operating speeds.
- Non-positive displacement pump definitions and operations.

Day Three – Pump Terms and Definitions

- Definitions used on suction side.
- Definitions used on discharge side.
- Pump output curve charts.
- Causes of cavitation.

Day Two – Internal Parts of Pumps

- Identification of internal pump parts, their operation and functions.
- Types of non-positive displacement pumps, propeller pumps (mixed and axial flow), turbine pumps (vertical and horizontal).